

## STATEMENT OF QUALIFICATIONS

**NAME OF LAB:** Scientific Crime Detection Laboratory  
5500 E. Tudor Road  
Anchorage, AK 99507

**DATE:** June 11, 2009

**NAME:** Sara L. Graziano

**JOB TITLE:** Forensic Scientist I

### DISCIPLINE:

DNA

### EDUCATION:

<u>Institution</u>	<u>Dates attended</u>	<u>Major</u>	<u>Degree completed</u>
Miami University of Ohio	8/1990 – 5/1992	Zoology	n/a
Coastal Carolina University	10/1992 – 5/1995	Marine Science/biology	B.S.
Auburn University	8/1996 – 5/1998	Fisheries & Aquaculture	n/a
Georgia Institute of Technology	8/1999 – 12/2001	Applied Biology	M.S.

### OTHER TRAINING:

Applied Biosystems GeneMapper® ID-X v1.0 Software Training (Anchorage, AK – October 28-30, 2008)

- Installation, Data Analysis, Validation, and Use as an Expert System (instructed by April Orbison)

Summer Institute of Statistical Genetics directed by Dr. Bruce Weir (Seattle, WA – June 14-23, 2006)

- Module 4: Population Genetic Data Analysis for Natural Populations (instructed by Bruce Weir, Kent Holsinger)
- Module 7: MCMC for Genetics (instructed by Eric Anderson, Matthew Stephens)
- Module 11: Advanced Pedigree Analysis using MCMC (instructed by Elizabeth Thompson, Shili Lin)

### PROFESSIONAL AFFILIATIONS:

American Society of Microbiology, 1998 – 2001  
American Fisheries Society, 2003 – 2008

### EMPLOYMENT HISTORY:

- (1) Job Title: Forensic Scientist I  
Employer: Alaska Scientific Crime Detection Laboratory  
Principal Duties: DNA casework analyst in training  
Tenure: September 2008 – present
- (2) Job Title: Geneticist  
Employer: U.S. Geological Survey  
Principal Duties: assess, interpret and report genetic structure for wildlife populations  
Tenure: September 2003 – September 2008
- (3) Job Title: Adjunct Faculty  
Employer: University of Alaska - Anchorage  
Principal Duties: instruct laboratory courses in microbiology  
Tenure: August 2003 – present
- (4) Job Title: PhD student - microbiology

Employer:	Georgia Institute of Technology
Principal Duties:	molecular microbiology research
Tenure:	January 2002 – May 2003

  

(5)	Job Title:	Animal Care Specialist/Research Facility Technician
	Employer:	Zygogen LLC.
	Principal Duties:	maintenance and operation of a fish rearing facility for molecular research
	Tenure:	May 2001 – January 2002

## PEER REVIEWED PUBLICATIONS:

Nielsen, J.L., **S.L. Graziano**, C. Kofczay and A. Byrne. (In review). Microsatellites describe genetic diversity on multiple scales for steelhead in the Snake River Basin, Idaho. Submitted to the *North America Journal of Fisheries Management*.

**Graziano, S.L.** and J.L. Nielsen. (In review). Genetic population structure of Alaskan Pacific halibut (*Hippoglossus stenolepis*). Submitted to *Conservation Genetics*.

Ramey, A., **S.L. Graziano** and J.L. Nielsen. 2008. Isolation and characterization of microsatellite loci from the Arctic Cisco (*Coregonus autumnalis*). *Molecular Ecology Resources* 8:357-359.

Williams, I., G.H. Reeves, **S.L. Graziano**, J.L. Nielsen. 2007. Genetic investigation of natural hybridization between rainbow trout and cutthroat trout in the Copper River Delta, Alaska. *Transactions of the American Fisheries Society* 136:926-942.

**Graziano, S.L.**, K.H. Brown and J.L. Nielsen. 2005. Nomenclature of mitochondrial DNA haplotypes for *Oncorhynchus mykiss*. *Transactions of the American Fisheries Society* 134:1271-1273.

Plumb, J. A., A.D. Noyes, **S. Graziano**, J. Wang, J. Mao and V.G. Chinchar. 1999. Isolation and identification of viruses from adult largemouth bass during a 1997-1998 survey in the southeastern United States. *Journal of Aquatic Animal Health* 11:391-399.

## TECHNICAL REPORTS:

Nielsen, J.L., C.E. Zimmerman, **S.L. Graziano**, A. Ramey, and V. VanBiela. 2008. Testing molecular and otolith tools to investigate population-of-origin and migration in Arctic Cisco found in the Colville River, Alaska. Annual technical report submitted to Minerals Management Services (MMS), Anchorage, AK, April 2008.

**Graziano, S.L.** and J.L. Nielsen. 2008. Assessment of individual genotypes, genetic lineages and circadian rhythm genes in brown bears (*Ursus arctos*) at Brooks River, Katmai National Park and Preserve, AK. NRPP PMIS-5561: Progress Report 2008.

Nielsen, J.L., C.E. Zimmerman, **S.L. Graziano** and A. Ramey. 2007. Testing molecular and otolith tools to investigate population-of-origin and migration in Arctic Cisco found in the Colville River, Alaska. Pilot study progress report submitted to Minerals Management Services (MMS), Anchorage, AK, April 2007.

**Graziano, S.L.** and J.L. Nielsen. 2006. Brooks River brown bear project: Progress Report 2006. Technical report submitted to National Park Service, King Salmon, AK, October 2006.

Nielsen, J.L., **S.L. Graziano**, I. Williams and A. Byrne. 2005. Genetic population structure of Snake River basin steelhead in Idaho. Final technical report submitted to Idaho Department of Fish and Game, Boise, ID, March 2005.

Nielsen, J.L., T.C. Wiacek and **S.L. Graziano**. 2005. Population genetic structure of rainbow trout in the upper Ventura River watershed based on microsatellite and mtDNA analyses. Final technical report submitted to U.S.G.S. Western Fisheries Research Center, Seattle, WA, August 2005.

**Graziano, S.L.** and J.L. Nielsen. 2004. Genetic population structure of rainbow trout from the White Salmon River sub-drainage: Including inference on hybridization with coastal cutthroat trout. Technical report submitted to U.S. Forest Service, Gifford Pinchot National Forest, Wind River, WA, June 2004.

## **POSTERS and PRESENTATIONS:**

**S.L. Graziano** and J.L. Nielsen. "Population Genetic Survey of Brown Bears at Brooks River". Poster presented at the Alaska Chapter of the Wildlife Society Annual Meeting, Anchorage, AK, April 2008.

**S.L. Graziano** and J.L. Nielsen. "Genetic Analysis of Alaskan Pacific Halibut". Poster presentation at the American Fisheries Society Annual Meeting, San Francisco, CA, September 2007.

Ramey, A., **S.L. Graziano** and J.L. Nielsen. "Testing molecular tools to investigate population-of-origin and migration of Arctic Cisco (*Coregonus autumnalis*) collected in the Colville River, Alaska." Poster presentation at the American Fisheries Society Annual Meeting, San Francisco, CA, September 2007.

**S.L. Graziano**, J.L. Nielsen, R. Valenzuela, and A. Byrne. "Genetic Population Structure of Snake River Basin Steelhead in Idaho". Invited presentation given at the Coastwide Salmonid Genetics Conference, Newport, OR, June 2004.

**S.L. Graziano**, I. Williams, G.K. Sage, C.E. Zimmerman, and J.L. Nielsen. "The importance of genetic verification for determination of Atlantic salmon in North Pacific waters." Invited poster presented at the Invasive species symposium – The Western section of the Wildlife Society, Sacramento, CA, October 2003.

**S.L. Graziano**, C.A Haller, C. Moore and T. DiChrisina. "Anaerobic iron respiration in *Shewanella putrefaciens*." Poster presented at the American Microbiology Society Annual Meeting, Salt Lake City, UT, April 2003.